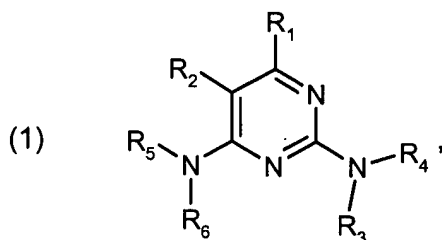


Claims 1-21 (cancelled).

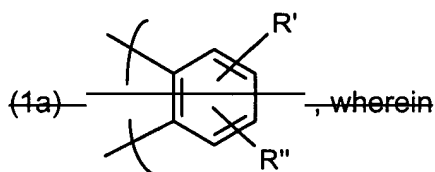
22. **(currently amended)** A method for the antimicrobial treatment of a surface of a plastic, which comprises contacting said ~~surface plastic~~ with an antimicrobially effective amount of a 2,4-bis(alkylamino)pyrimidine of formula



wherein

R<sub>1</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl or C<sub>6</sub>-C<sub>10</sub>aryl;

R<sub>2</sub> is hydrogen or C<sub>1</sub>-C<sub>12</sub>alkyl; ~~or R<sub>1</sub> and R<sub>2</sub> together form a radical of formula~~



~~R' and R'' are each independently of the other hydrogen, C<sub>1</sub>-C<sub>6</sub>alkyl or C<sub>1</sub>-C<sub>6</sub>alkoxy;~~

R<sub>3</sub> and R<sub>5</sub> are each independently of the other hydrogen or C<sub>1</sub>-C<sub>8</sub>alkyl;

R<sub>4</sub> is C<sub>1</sub>-C<sub>20</sub>alkyl, unsubstituted phenyl, C<sub>6</sub>-C<sub>10</sub>aryl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>1</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>6</sub>alkylamino-C<sub>1</sub>-C<sub>6</sub>alkyl, mono-C<sub>1</sub>-C<sub>6</sub>alkylamino-C<sub>1</sub>-C<sub>6</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1-4</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1-4</sub>-NH<sub>2</sub>;

R<sub>6</sub> is C<sub>1</sub>-C<sub>20</sub>alkyl, C<sub>6</sub>-C<sub>10</sub>aryl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>1</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>6</sub>alkylamino-C<sub>1</sub>-C<sub>6</sub>alkyl, mono-C<sub>1</sub>-C<sub>6</sub>alkylamino-C<sub>1</sub>-C<sub>6</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1-4</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1-4</sub>-NH<sub>2</sub>; or

R<sub>3</sub> and R<sub>4</sub> and/or R<sub>5</sub> and R<sub>6</sub> together form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

23. **(previously presented)** A method according to claim 22, wherein

R<sub>1</sub> is C<sub>1</sub>-C<sub>8</sub>alkyl or phenyl.

24. **(previously presented)** A method according to claim 22, wherein

R<sub>2</sub> is hydrogen or C<sub>3</sub>-C<sub>8</sub>alkyl.

25. **(previously presented)** A method according to claim 22, wherein

R<sub>3</sub> and R<sub>5</sub> are each independently of the other hydrogen or C<sub>1</sub>-C<sub>8</sub>alkyl.

26. **(previously presented)** A method according to claim 22, wherein

R<sub>4</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl, unsubstituted phenyl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>2</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, mono-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-NH<sub>2</sub>; and

R<sub>6</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl, C<sub>6</sub>-C<sub>10</sub>aryl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>2</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, mono-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-NH<sub>2</sub>.

27. **(previously presented)** A method according to claim 22, wherein

R<sub>1</sub> is C<sub>1</sub>-C<sub>8</sub>alkyl or phenyl;

R<sub>2</sub> is hydrogen or hexyl; and

R<sub>3</sub> and R<sub>5</sub> are each independently of the other hydrogen or C<sub>1</sub>-C<sub>8</sub>alkyl;

R<sub>4</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl, unsubstituted phenyl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>2</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, mono-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-NH<sub>2</sub>; and

R<sub>6</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl, C<sub>6</sub>-C<sub>10</sub>aryl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>2</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, mono-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-NH<sub>2</sub>; or

R<sub>3</sub> and R<sub>4</sub> and/or R<sub>5</sub> and R<sub>6</sub> together form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

28. **(cancelled)**

29. **(currently amended)** A method according to claim 22, wherein

R<sub>1</sub> is C<sub>1</sub>-C<sub>4</sub>alkyl or phenyl;

R<sub>2</sub> is hydrogen or hexyl; ~~or R<sub>4</sub> and R<sub>2</sub> together form a radical of formula (1a) as defined in claim 22,~~  
wherein

~~R' is hydrogen, C<sub>4</sub>-C<sub>3</sub>alkyl or C<sub>4</sub>-C<sub>3</sub>alkoxy, and~~

~~R'' is C<sub>4</sub>-C<sub>3</sub>alkyl or C<sub>4</sub>-C<sub>3</sub>alkoxy;~~

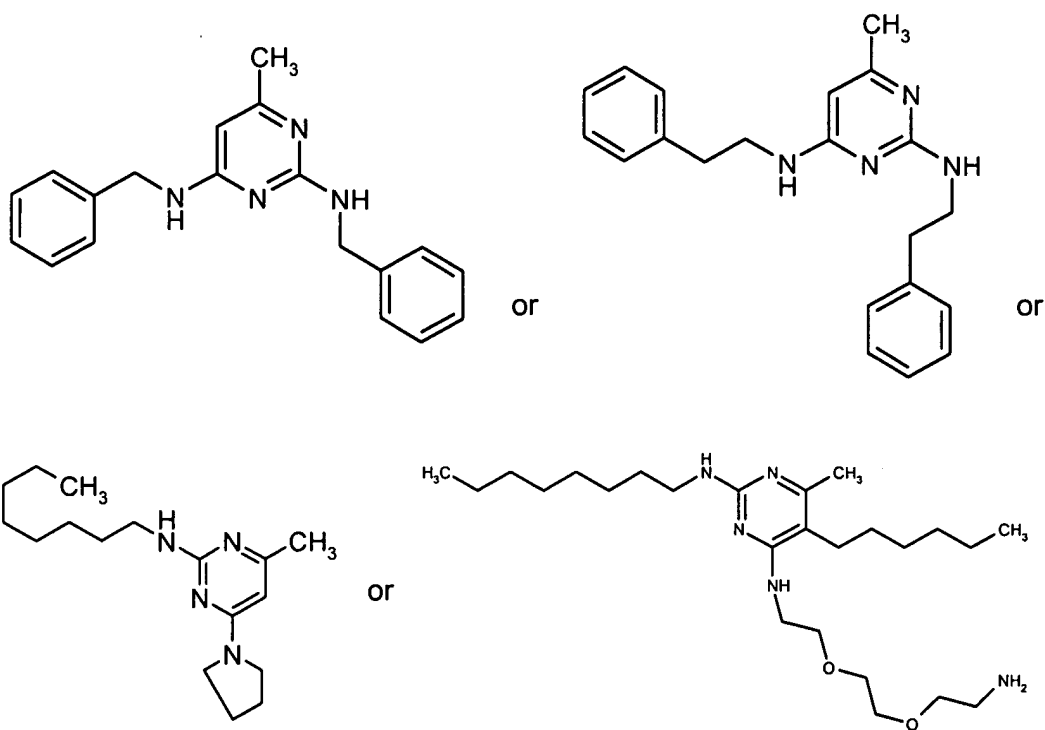
R<sub>3</sub> and R<sub>5</sub> are each independently of the other hydrogen or C<sub>1</sub>-C<sub>8</sub>alkyl;

R<sub>4</sub> is C<sub>1</sub>-C<sub>12</sub>alkyl, unsubstituted phenyl, C<sub>6</sub>-C<sub>10</sub>aryl-C<sub>1</sub>-C<sub>6</sub>alkyl, hydroxy-C<sub>2</sub>-C<sub>6</sub>alkyl, di-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, mono-C<sub>1</sub>-C<sub>4</sub>alkylamino-C<sub>1</sub>-C<sub>4</sub>alkyl, -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-OH or -(CH<sub>2</sub>)<sub>2</sub>-(O-(CH<sub>2</sub>)<sub>2</sub>)<sub>1,2</sub>-NH<sub>2</sub>; and

$R_6$  is  $C_1$ - $C_{12}$ alkyl,  $C_6$ - $C_{10}$ aryl,  $C_6$ - $C_{10}$ aryl- $C_1$ - $C_6$ alkyl, hydroxy- $C_2$ - $C_6$ alkyl, di- $C_1$ - $C_4$ alkylamino- $C_1$ - $C_4$ alkyl, mono- $C_1$ - $C_4$ alkylamino- $C_1$ - $C_4$ alkyl,  $-(CH_2)_2-(O-(CH_2)_2)_{1,2}-OH$  or  $-(CH_2)_2-(O-(CH_2)_2)_{1,2}-NH_2$ ; or  $R_3$  and  $R_4$  together, and  $R_5$  and  $R_6$  together, form a pyrrolidine, piperidine, hexamethyleneimine or morpholine ring.

30. **(previously presented)** A method according to claim 22, wherein  $R_3$  and  $R_5$ , and  $R_4$  and  $R_6$ , have the same meanings.

31. **(previously presented)** A method according to claim 22, wherein the 2,4-bis(alkylamino)pyrimidine is of the formula



32-42. **(cancelled)**